REMARKS

The specification has been reviewed, and clerical errors of the specification have been amended.

On page 2 of the Action, claims 9-11, 13-17, 22 and 23 were objected to under 37 CFR 1.75(c). On page 3 of the Action, claims 1-3, 18 and 20 were rejected under 35 U.S.C. 112, second paragraph, and under 35 U.S.C. 102(b) as being anticipated by WO '373. On page 4 of the Action, claims 1-3, 18 and 20 were rejected under 35 U.S.C. 102(b) as being anticipated by Siebert et al.

In view of the objections and rejections, claims 1, 3-10, 13-17 and 19-23 have been amended. Claims are allowable over the cited references.

As clearly recited in amended claim 1, a brake apparatus of the invention comprises a master cylinder, a pump which is driven by the service braking maneuver, a braking force control device, and a travel modulating device. The master cylinder includes an input shaft which travels according to travel of an operational member for a service braking maneuver, a master cylinder pressure chamber, and a master cylinder piston which develops a master cylinder pressure in the master cylinder pressure chamber according to the travel of the input shaft.

In the invention, the braking force control device receives operational conditions of the service braking and another braking different from the service braking. In the service braking maneuver, the braking force control device controls a discharge pressure of the pump according to the operational conditions of the service braking and the another braking. The travel modulating device modulates the travel of the operational member in the service braking maneuver to become substantially same even in different braking conditions by the service braking and the another braking by using the discharge pressure of the pump controlled by the braking force control device.

Accordingly, the travel of the operational member can remain the same as for the service braking whenever the braking pressure

for the wheel is changed relative to the same input according to the service braking operation or another braking, e.g. regenerative braking, operation.

WO '373 discloses a device for controlling a pump 190 in an electro-hydraulic braking system. The pressure by a brake pedal 100 is detected by a pressure sensor 130, and the control unit controls inflow valves 161-164 and outflow valves 141-144 according to the detected pressure. Also, by controlling the hydraulic fluid led from an accumulator 185 to wheel brake cylinders VL-HR, the braking force according to the driver is generated. The desired pedal stroke is obtained by a pedal position simulator 125.

In the invention, the braking force control device receives operational conditions of the service braking and the another braking different from the service braking. In WO '373, the service braking is only used for braking the wheels. Namely, the wheel braking cylinders are not actuated by a braking device different from the service braking.

In the invention, in the service braking maneuver, the braking force control device controls a discharge pressure of the pump according to the operational conditions of the service braking and the another braking. In WO '373, since the service braking is only utilized, the operational conditions of the braking system other than the service braking is not considered and utilized.

In the invention, the travel modulating device modulates the travel of the operational member in the service braking maneuver to become substantially same even in different braking conditions by the service braking and another braking by using the discharge pressure of the pump controlled by the braking force control device. In WO '373, although the pedal position simulator 125 is used, the travel of the operational member is not substantially same in different braking conditions by the service braking and the another braking.

The features of the invention are not disclosed or suggested by WO '373.

In Seibert et al., a pressure control valve 12 controls a discharge pressure from a pump 10 according to a master cylinder pressure generated by a master cylinder 1 formed by pushing a brake pedal 22. Also, the master cylinder pressure switches and controls multidirectional valves 31-34. Thus, the discharge pressure from the pump 10 is supplied to brake wheels 4-7 controlled according to the master cylinder pressure to thereby generate the braking force. At this time, the pedal stroke as desired by a driver is obtained by a stopping distance simulator 37.

In the invention, the braking force control device receives operational conditions of the service braking and the another braking different from the service braking. In the service braking maneuver, the braking force control device controls a discharge pressure of the pump according to the operational conditions of the service braking and the another braking. In Seibert et al., the pressure control valve 12 is used, but it does not utilize the another braking condition.

In the invention, the travel modulating device modulates the travel of the operational member in the service braking maneuver to become substantially same even in different braking conditions by the service braking and the another braking by using the discharge pressure of the pump controlled by the braking force control device. In Seibert et al., the stopping distance simulator 37 is used, but it does not constitute the travel modulating device, which modulates the travel of the operational member to become substantially the same in different braking conditions.

Therefore, the features of the invention are not disclosed or suggested in Seibert et al.

The cited references simply disclose general service braking devices, wherein the braking is made by the pushing of the brake pedal by a driver, and a discharge pressure from a pump or accumulator is supplied to wheel cylinders according to the pedal force. The stroke control devices of the cited references control only the service brakes, and the service brake operation stroke or

travel is controlled at the time of service braking by the pump discharge pressure controlled by the brake force control device. There is no other brake system, which is not considered at all. In the invention, the another brake, such as regenerative brake, is used in addition to the service brake when the braking is applied. In the invention, the service brake and the another brake are controlled to provide the same brake stroke by the pedal regardless of the condition of the service brake and/or the another brake.

The features of the invention are not disclosed or obvious from the cited references.

Reconsideration and allowance are earnestly solicited.

A one month extension of time is hereby requested. A check in the amount of $110.00 is attached herewith for the one month extension of time.

Respectfully Submitted,

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